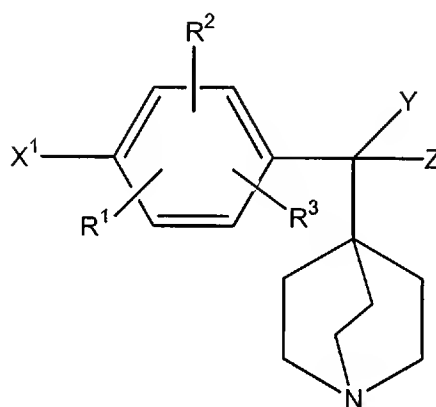


### In the Claims

Please cancel claims 30-32 and amend claims 4-6, 9, 11-24, and 26-27 as follows:

1. (Original) A method for treatment of a mammal threatened or afflicted by an infectious pathogen by administering to said mammal an effective amount of a quinuclidine compound of formula I:



wherein:

a) R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>5</sup> are individually H, OH, halo, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl((C<sub>1</sub>-C<sub>6</sub>)alkyl), (C<sub>2</sub>-C<sub>6</sub>)alkenyl, (C<sub>2</sub>-C<sub>6</sub>)alkynyl, (C<sub>1</sub>-C<sub>6</sub>)alkanoyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl; (C<sub>1</sub>-C<sub>6</sub>)alkylthio or (C<sub>1</sub>-C<sub>6</sub>)alkanoyloxy; or R<sup>1</sup> and R<sup>2</sup> together are methylenedioxy;

b) X<sup>1</sup> is NO<sub>2</sub>, CN, -N=O, (C<sub>1</sub>-C<sub>6</sub>)alkylC(O)NH-, oxazoliny, or N(R<sup>6</sup>)(R<sup>7</sup>) wherein, R<sup>6</sup> and R<sup>7</sup> are individually, H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, ((C<sub>1</sub>-C<sub>6</sub>)alkyl), wherein cycloalkyl optionally comprises 1-2, S, nonperoxide O or N(R<sup>8</sup>), wherein R<sup>8</sup> is H, O, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, phenyl, or benzyl; aryl, aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl(C<sub>2</sub>-C<sub>6</sub>)alkenyl, heteroaryl, heteroaryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, or R<sup>6</sup> and R<sup>7</sup> together with the N to which they are attached form a 5- or 6-membered heterocyclic or heteroaryl ring, optionally substituted with R<sup>1</sup> and optionally comprising 1-2, S, non-peroxide O or N(R<sup>5</sup>);

c) Y and Z taken together are =O, -O(CH<sub>2</sub>)<sub>m</sub>O- or -(CH<sub>2</sub>)<sub>m</sub>- wherein m is 2-4, or Y is H and Z is OR<sup>9</sup> or SR<sup>9</sup>, wherein R<sup>9</sup> is H or (C<sub>1</sub>-C<sub>4</sub>)alkyl;

and the pharmaceutically acceptable salts thereof.

2. (Original) The method of claim 1, wherein the pathogen is a bacteria or virus.
3. (Original) The method of claim 1, wherein the amount is effective to inhibit entry of the pathogen or a subunit thereof into cells of the mammal.
4. (Currently amended) The method of claim 1 ~~claims 1-3~~, wherein the pathogen is a virus.
5. (Currently amended) The method of claim 1 ~~claims 1-4~~, wherein the pathogen is a retrovirus.
6. (Currently amended) The method of claim 1 ~~claims 1-5~~, wherein the pathogen is HIV.
7. (Original) The method of claim 3, wherein the cells are contacted *in vitro*.
8. (Original) The method of claim 3, wherein the cells are contacted *in vivo*.
9. (Currently amended) The method of claim 1 ~~claims 1-8~~, wherein the compound of formula I is administered to a human.
10. (Original) The method of claim 9, wherein the human has been exposed to a virus.
11. (Currently amended) The method of claim 9 ~~claims 9-10~~, wherein the human has been exposed to a retrovirus.
12. (Currently amended) The method of claim 9 ~~claims 9-11~~, wherein the human is HIV-positive.
13. (Currently amended) The method of claim 9 ~~claims 9-12~~, wherein the human is an AIDS

patient.

14. (Currently amended) The method of claim 1 ~~claims 1-13~~, wherein  $X^1$  is  $N(R^6)(R^7)$ .
15. (Currently amended) The method of claim 1 ~~claims 1-14~~, wherein  $X^1$  is  $NH_2$ .
16. (Currently amended) The method of claim 1 ~~claims 1-15~~, wherein 1 or 2 of  $R^1$ ,  $R^2$  or  $R^3$  is H or  $(C_1-C_6)$ alkoxy, ~~preferably  $(C_1-C_3)$ alkoxy~~.
17. (Currently amended) The method of claim 1 ~~claims 1-16~~, wherein Y and Z together are  $=O$ .
18. (Currently amended) The method of claim 1 ~~claims 1-16~~, wherein Y is OH and Z is H.
19. (Currently amended) The method of claim 1 ~~claims 1-18~~, wherein  $R^1$ ,  $R^2$  and  $R^3$  are H.
20. (Currently amended) The method of claim 1 ~~claims 1-6 and 8-19~~, wherein the compound of formula I is administered orally.
21. (Currently amended) The method of claim 1 ~~claims 1-6 and 8-19~~, wherein the compound of formula I is administered parenterally.
22. (Currently amended) The method of claim 1 ~~claims 1-6, 8-19 and 21~~, wherein the compound of formula I is administered by injection, infusion, inhalation or insufflation.
23. (Currently amended) The method of claim 1 ~~claims 1-22~~, wherein the compound of formula (I) is administered in combination with a pharmaceutically acceptable carrier.
24. (Currently amended) The method of claim 23, wherein the carrier is a liquid, ~~such as a~~

~~solution, suspension or gel.~~

25. (Original) The method of claim 23, wherein the carrier is a solid.
26. (Currently amended) The method of claim 23 ~~claims 22-25~~, wherein the carrier comprises zinc sulfate heptahydrate.
27. (Currently amended) The method of claim 1 ~~claims 1-26~~, wherein the compound of formula I is [4-amino-phenyl)-(1-aza-bicyclo[2.2.2]oct-4-yl)methanone.
28. (Original) A composition comprising a compound of formula (I) and a pharmaceutically acceptable carrier.
29. (Original) The composition of claim 28, wherein the composition is in a dosage form.
30. (Cancel) The use of a compound of formula I to prepare a medicament for treating a mammal threatened or afflicted by an infectious pathogen.
31. (Cancel) The use of claim 30, wherein the infectious pathogen is a virus or bacteria.
32. (Cancel) The use of claim 30, wherein the medicament includes a physiologically acceptable carrier.